

Work Order ID 159646

Monday, April 17, 2017 9:22:57 AM

159646

Per Concession 40000006786

U/R

Page 1

Item ID: 6F9540V00231 **POSITIVE RECALL** Accept *N900040100* Setup Start *NS1*
 Revision ID: URF 16-692 Stop *NS2*
 Item Name: AW169 Lower Cutter Installation Assembly
 Start Date: 4/20/2017 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 4/24/2017 Req'd Qty: 1.00 *1* Customer:
 Reference: SCHEDULED/C

Approvals: Process Plan: *[Signature]* Date: APR 17 2017 Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D169-841	B Per concession 40000006786 6-7/2017								

100 DOCUMENT CONTROL
 100
 DC Memo 0.00
 Doc.Control -USB or Paperwork Photocopy bluefile per PPP D169-841-015 chg002 and create labels per 6F9540V00231 CHG002

DAS 28 9-89 JUN 02 2017

110 Pick Kit 0.00
 110
 Packaging Memo 0.00
 Packaging

F.A.I.R. COMPLETION
 REQUIRED
 MATERIAL CERTIFICATION
 REQUIRED

DAS 6 9-89 APR 20 2017 DAS 27 9-89

120 QC4- 100% Inspect kits for completeness 0.00
 120
 QC Memo 0.00
 Quality Control

DAS 28 39 QC APPROVAL ONLY JUN 02 2017

- * All must be created by QA
- * All must contain concession Number
- * All Parts must be identified w/ concession Number.
- * Fair must be complete.

POSITIVE RECALL
 EFFECTIVE 7/1/17 AUTH DATE

Concession 40000006786

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
☐ Environment	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
☐ Design	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
☐ Doc/Data	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
☐ Equip/Tooling	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
☐ Handling/Pre	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
☐ Material	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
☐ Internal Transport	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
☐ Tribal Knowledge	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
☐ LOA	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
☐ Substation	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
☐ Past Expiry Date	☐ Manufacturing Process	OTHER : _____					
☐ Misidentified	☐ Past Due						

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Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
 QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

[illegible]

 JUN 02 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. COOR. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Monday, April 17, 2017 9:22:57 AM

Page 1

Work Order ID: 159646

159646

Parent Item: 6F9540V00231

6F9540V00231

Parent Item Name: AW169 Lower Cutter Installation Assembly

Start Date: 4/20/2017

Required Date: 4/24/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 13.11.13 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D169-841-015 *D169-841-015* AW169 Lower Cutter		Manufactured	No				Each	0.0000		1 <i>(50) 666b</i>			

DAS
28
0-39

DAS
6

APR 20 2017

DAS
27
0-39

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
85				85				Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

		Supplier Concession				PAGE 1 of 2	PLANT Leonardo Helic. - Vergiate	
Supplier NC N.	AWC 006/01		Date	02.02.2017		AW Concession	400000061786	
P/N	6F9540V00231		Grade/Category	NC		Purchase Order	4801373666	
Part Description	PROTECTR, CCP ASSY LOWER		Batch Quantity	20,000		Drawing Issue		
AW NC	GUIDO BRUSCINO		Defective Quantity	20,000		A/C Type/Model	AW6	
Supplier	DART AEROSPACE LTD		Contract					
Defect FO01 - Wrong dimensions - * 02.02.2017 09:40:16 GUIDO BRUSCINO (40067) * see supplier document attached - B/N quantities and PO's listed in the Cause of Defect								
Repetitiveness (same P/N - Defect Code) NO ☒ YES ☐ Follow								
ENGINEERING Evaluation and Proposal								
Engineering Evaluations, including Specialist inputs: * 10.02.2017 18:01:48 MARCELLO STEFANELLI (9273) * The part is acceptable with the action proposed by the supplier applied.			Investigation Report n.			Compliance Report n.		
Classification of Deviation from Type Design i.a.w. EASA Part 21A.91 : Minore/B								
Defect effect						Limitations		
	Before Repair		After Repair					
Safety	☐ YES	☐ YES	☐ YES	☐ NO	☐ YES (to specificity) ☒ NO			
Life or Duration	☐ YES	☐ YES	☐ YES	☐ NO				
Strenght	☐ YES	☐ YES	☐ YES	☐ NO				
Performances	☐ YES	☐ YES	☐ YES	☐ NO				
Interchangeability	☐ YES	☐ YES	☐ YES	☐ NO				
Reliability	☐ YES	☐ YES	☐ YES	☐ NO				
Maintainability	☐ YES	☐ YES	☐ YES	☐ NO				
Installability	☒ YES	☐ YES	☒ YES	☐ NO				
Testability	☐ YES	☐ YES	☐ YES	☐ NO				
Only Appearance	☐ YES	☐ YES	☐ YES	☐ NO				
No Effect	☐ YES	☐ YES	☐ YES	☐ NO				
Repair Proposal: * 10.02.2017 18:01:48 MARCELLO STEFANELLI (9273) * See attached supplier document.						Decision ☐ Use rep. with spec.repair(not yet applied) ☒ Use repaired with known repair(yet applied) ☐ Use As Is ☐ Use repaired for tests only(see Limitations) ☐ Use As Is for tests only(see Limitations) ☐ Scrap		
Concession Classification ☐ MAJOR ☒ MINOR			Re-submit after Repair ☐ YES ☒ NO					
Mark part with Concession ☒ NO ☐ YES			Method :					
ATE	MARCELLO STEFANELLI		CPE			Date	10.02.2017	
Checks and tests to be performed								
Repair registration with repair WO ☒			Number:					
Repair Evaluation:								
Final Decision								
S/N	Use As Is (UTI)	Use Repaired (RIL)	Scrap (SCA)	S/N	Use As Is (UTI)	Use Repaired (RIL)	Scrap (SCA)	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
	☐	☐	☐		☐	☐	☐	
Not Serialized	Use As Is (Q.ty)	Use Repaired (Q.ty)	Scrap (Q.ty)					
Role	AW ATE	AW CPE	Inspection Clearance Repair	Quality	Customer	MoD or Authority Representative		
Signature	MARCELLO STEFANELLI							
Date	10.02.2017							

Supplier NC N.	AWC 006/01	Date	02.02.2017	AW	400000061786	Purchase Order	4801373666
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DEFECT 0001
FO01
Wrong dimensions

attachment

 AgustaWestland A Finmeccanica Company		CONCESSION				Pag. 1 of 2	
Manuf. Doc. N.	AWC 006	Date		AW Doc. N.		Purchase Order	4800671131 4800722284 4801147764 4801186922 4801218851 4801288960 4801373666
AW P/N	6F9540V00231	S/N / Batch Number	B109195 Qty. (1) B133355 Qty. (2) B134314 Qty. (1) B134315 Qty. (1) B134842 Qty. (1) B137492 Qty. (1) B137355 Qty. (2) B137816 Qty. (1) B137818 Qty. (1) B137817 Qty. (1) B140379 Qty. (3) B140381 Qty. (2) B147002 Qty. (2) B150786 Qty. (1)	Grade	A	AW Drawing Issue	B
Description	Lower Cutter Assy			Batch Qty	20	Defective Qty	20
Manufacturer	Dart Aerospace			Model	AW169		
Defect(s) Description							
Leonardo has informed Dart that there are interference issues installing the lower cable cutter D4842-041 onto the Leonardo interface bracket.							
				Department	Inspector	Signature	Date
				Quality	DAS 16 9-89		2017/02/01
Defect(s) Cause							
The Lower Cutter body has a dimension of 10.9 +0.25/-0.00 mm. This dimension was reported as part of the approved FAI and has been met with all delivered product.							
				Department	Inspector	Signature	Date
				Quality	DAS 16 9-89		2017/02/01
Corrective Action						Complete Before	
In order to mitigate the interference issue for Leonardo, Dart is proposing to remove sufficient material to make the overall installation dimension at 22.15 mm +0.05/-0.35.							
				Department	Inspector	Signature	Date
				Quality	DAS 16 9-89		2017/02/01

For "MANUFACTURER" SUPPLIERS ONLY
ENGINEERING evaluation and proposal

Engineering evaluation

Investigation report

n.....

Compliance report

n.....

Dart's position is that this change will not impact the structural substantiation presented in Report DA169-4 for the lower cutter body since this is not a section with the lowest margin. Therefore removing 0.3 mm max from each part will not impact the structural integrity of the lower cutter assembly. The dimension on the cutter body part D4842-3/-4 will be 10.80 +0.00/-0.200.

The dimension change of the two lower cutter body parts mating, plus the sealant, anodize and primer layers will be defined as a dimension of 22.15 +0.05/-0.35 mm on the assembled lower cutterbody and will be incorporated into the D4842 drawing for inspection.

	Defect effects		Limitations
	Before any repair	After any repair	
	☐ yes	☐ yes ☐ no	☐ yes (specify) ☒ no
Safety	☐ yes	☐ yes ☐ no	
Life	☐ yes	☐ yes ☐ no	
Strength	☐ yes	☐ yes ☐ no	
Performances	☐ yes	☐ yes ☐ no	
Interchangeability	☐ yes	☐ yes ☐ no	
Reliability	☐ yes	☐ yes ☐ no	
Maintainability	☐ yes	☐ yes ☐ no	
Installability	☒ yes	☐ yes ☒ no	
Testability	☐ yes	☐ yes ☐ no	
Only aspect	☐ yes	☐ yes ☐ no	
Repair Proposal None		Decision to use ☐ Use repaired with specific repair ☐ Use repaired with known repair ☐ Use as is ☐ Use repaired for tests (see Limitations) ☐ Use as is for tests (see Limitations) ☒ Scrap	
Concession Classification		☒ Major ☐ Minor	Submit after repair ☐ yes ☐ no

Work Order ID 159646

Monday, April 17, 2017 9:22:57 AM

159646

Per concession 4000006786

U/R Page 1

Item ID: 6F9540V00231

Accept

N900040100

Setup Start *NS1*

Revision ID: URF 16-692

Stop *NS2*

Item Name: AW169 Lower Cutter Installation Assembly

Start Date: 4/20/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 4/24/2017 Req'd Qty: 1.00

1

Customer:

Reference: SCHEDULED/C

Approvals: Process Plan:

Date: APR 17 2017 Tooling:

Date:

Run Start *NR1*

QC:

Date: SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D169-841	B Per concession 4000006786 6/16/17

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile per PPP D169-841-015 chg002 and create labels per 6F9540V00231 CHG002

CB

JUN 02 2017

110

Pick Kit

0.00

F.A.I.R. COMPLETION
REQUIRED

110

Packaging

Memo

0.00

MATERIAL CERTIFICATION
REQUIRED

Packaging

APR 20 2017

DAS
6
9-00

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control

QC APPROVAL

ONLY

* All must be created by QA

* All must contain concession Number

* All Parts must be identified w/ concession Number

POSITIVE RECALL

Auth: 5
DATE